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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/644,149	08/20/2003	Thomas A. Greenwood	95-247C	6491

7590

02/04/2005

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Seattle, WA 98124-2207

EXAMINER
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PATEL, RAMESH B

ART UNIT	PAPER NUMBER
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2121

DATE MAILED: 02/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/644,149

Applicant(s)

GREENWOOD ET AL.

Examiner

Ramesh B. Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 August 2003.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-9 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 20 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 9/15/2003.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. Claims 1-9 are presented for examination.
2. The claims and only the claims form the metes and bounds of the invention.  
“Office personnel are to give claims their broadest reasonable interpretation in light of the supporting disclosure. In re Morris, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim are not read into the claim. In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969)” (MPEP p 2100-8, c 2, I 45-48; p 2100-9, c 1, I 1-4). The Examiner has full latitude to interpret each claim in the broadest reasonable sense. The Examiner will reference prior art using terminology familiar to one of ordinary skill in the art. Such an approach is broad in concept and can be either explicit or implicit in meaning.

### **Priority**

3. The examiner has made official notice that the data provided for application(s) domestic priority not consistent with PTO records such as on page 2 of the specification and on “Transmittal of New Application” page 1. **“Application 08/869,857, filed June 3, 1997” should be “Application 08/867,857, filed June 6, 1997”.** An application in which the benefits of an earlier application are desired must contain a specific reference to the prior application(s) in the first sentence(s) of the specification or in an application

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data sheet by identifying the prior application by application number (37 CFR 1.78(a)(2) and (a)(5)). If the prior application is a non-provisional application, the specific reference must also include the relationship (i.e., continuation, divisional, or continuation-in-part) between the applications except when the reference is to a prior application of a CPA assigned the same application number.

The applicant is suggested to review this matter and make appropriate correction as required.

**Information Disclosure Statement**

4. The information disclosure statement (IDS) submitted on 9/15/2003 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

**Specification**

5. The disclosure is objected to because of the following informalities: the data provided for application(s) domestic priority not consistent with PTO records such as on page 2 of the specification and on "Transmittal of New Application" page 1.

**"Application 08/869,857, filed June 3, 1997" should be "Application 08/867,857, filed June 6, 1997".**

Applicant is suggested to review matter in the submitted original disclosure and make appropriate correction as required.

**Claim Rejections - 35 USC § 102**

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Kashiwagi et al. (US Patent 5,129,044).

As to claims 1, 5 and 9, Kashiwagi teaches the invention including information storage media and the method for improving the accuracy of a machine having a machine controller for guiding movement of a machine tool, comprising: computer software storage media having computer-readable information recorded to provide trickle feed, delta correction commands in machine media from an external software controller to a machine controller to correct for a position error determined by a comparison of the true position of a machine tool under the control of the machine controller and the position that the machine controller locates the machine tool following machine media positioning commands derived from an engineering specification of a part is taught as the position/force controlling apparatus for working machine having a computing section and memory section for storing, teaching data and playing back stored and computed data during play-back operation and delivering the same to a position command setting section through interpolation (see, abstract and figures 12-15,

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20 and 23 and col. 22, lines 20-40), the delta correction commands moving the machine tool if the position error exceeds a predetermined offset threshold, wherein the software controller records the correction commands for later analysis of machine wear and uses a standard deviation protocol to determine the rest position when the machine tool tops following movement (see, abstract and figures 6-8 and col. 6, lines 20-54 and col. 18, lines 46-68).

As to claim 2, Kashiwagi teaches the information storage media further comprising a standard deviation control protocol for determining the rest position of the end effector (see, abstract and figures 7-9 and col. 3, lines 28-65).

As to claims 3-4 and 6, Kashiwagi teaches the information storage media further comprising a first code portion that uses least squares fit algorithms for providing a first order, linear approximation of the position error (see, figures 1 and 7-10 and col. 3, lines 28-65).

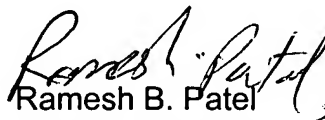
As to claims 7-8, Kashiwagi teaches a machine tool system for improving positioning accuracy of a machine tool, comprising: a machine having a machine tool and a machine controller and a software controller connected to the machine controller for executing the information storage media of claim 1 (see, abstract and figures 12-15, 20 and 23 and col. 22, lines 20-40 and col. 29, line 54 to col. 30, line 2).

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramesh B. Patel whose telephone number is 571-272-3688. The examiner can normally be reached on M-Th; 7:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight can be reached on 571-272-3687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Ramesh B. Patel  
Primary Examiner  
Art Unit 2121  
2/2/05

rp